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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,652	10/10/2003	Jeffrey Valentage	2003B106	7245

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EXAMINER	
KRUER, KEVIN R	
ART UNIT	PAPER NUMBER
1773	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 10/681,652	**Applicant(s)** VALENTAGE ET AL.
	Examiner Kevin R. Kruer	**Art Unit** 1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-51* is/are pending in the application.

4a) Of the above claim(s) *21-51* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 9-11, 13-17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akki et al (US 6,020,034) in view of Ellison (US 6,399,193) for reasons of record.

Akki teaches a coated substrate wherein the coating prepared from a particulate polymer composition that exhibits improved corrosion and creep resistance (abstract). The coating comprises an acid-functionalized particulate polymer wherein the acid functionality of the polymer is maintained within a desired range by crosslinking and or neutralizing said acid. Neutralizing the acid functionality of the polymer component results in hardening of the coatings resulting therefrom (abstract). The acid-functionalized polymer is preferably a copolymer comprising an olefin and an ethylenically unsaturated carboxylic acid (col 4, lines 28+). The preferred olefin is ethylene (col 4, line 30). Preferred unsaturated carboxylic acids are methacrylic and acrylic acids (col 5, lines 44+). The acid groups are neutralized using various ionic salts including those of zinc, aluminum, lithium, sodium, and the like (col 6, lines 13+). Zinc and aluminum salts are preferred (col 6, line 30). Said salt neutralized polymer is understood to read on the claimed ionomer layer. Akki teaches said polymer may be pigmented (col 8, line 63). The coating is applied to substrates such as primed or unprimed metal substrates (col 7, lines 46+) such as iron, steel, galvanized steel, aluminum and the like. Said primers layers are understood to be analogous to the claimed tie layers and the priming limitation of claim 20.

Akki teaches that the coating may be used with a clear coat finish (col 9, lines14+), but does not teach said clear coat may be an ionomer. However, Ellison teaches a surface laminate for use with metal automobile panels (col 1, lines 12+). The laminate comprises a color coat and a clear coat (col 1, lines 59+). The clear coat provides the first line of defense from environmental attack by UV rays, etching from acid rain, chipping from stones, marring, gouging, abrasion, staining and discoloration and other deleterious materials that come in contact with automobile exteriors (col 4, lines 18+). The clear coat may comprise SURLYN, and ethylene acrylic acid ionomer (col 4, line 55). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a SURLYN clear coat on the metal laminate taught in Akki. The motivation for doing so would have been because Ellison teaches SURLYN is useful as a clear coat composition for the exterior of automobiles due to its ability to provide a defense from environmental attack by UV rays, etching from acid rain, chipping from stones, marring, gouging, abrasion, staining and discoloration and other deleterious materials that come in contact with automobile exteriors.

With regard to claims 14, and 17, Akki teaches that both surfaces of the substrate may be coated with the ionomer coating. In such an instance, one of the ionomeric coatings is understood to read on the thermoplastic barrier coating of claims 14 and 17.

The substrate may be a metal substrate. The metal may be primed or coated before coating with the coating of the invention (col 7, lines 47+). One or more surfaces of the substrate can be coated (col 9, lines 6+). When the substrate is an automobile body, the coating can be applied directly onto the metal surface or primer can be applied first (col 9, lines 12+).

3. Claims 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akki et al (US 6,020,034) in view of Ellison (US 6,399,193), as applied to claims 9-11, 13-17, 19, and 20 above, and further in view of Kordomenos et al (US 4,491,641) for reasons of record.

Akki is relied upon as above, but does not teach that an epoxy primed unpolished metal substrate may be utilized as the substrate of the invention. However, Akki teaches that the substrate may be a metal substrate of an automotive body. Furthermore, Kordomenos teaches an unpolished metal substrate of an automotive vehicle body coated with a primer comprising an epoxy ester resin (col 2, lines 63+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the substrate taught in Kordomenos in the invention taught in Akki. The motivation for doing so would have been that Kordomenos teaches that such substrates are suitable for use as automotive body panels.

4. Claims 9-11, 13-17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akki et al (US 6,020,034) in view of JP 03-126777 (herein referred to as Mitsui) for reasons of record.

Akki teaches a coated substrate wherein the coating prepared from a particulate polymer composition that exhibits improved corrosion and creep resistance (abstract). The coating comprises an acid-functionalized particulate polymer wherein the acid functionality of the polymer is maintained within a desired range by crosslinking and or neutralizing said acid. Neutralizing the acid functionality of the polymer component results in hardening of the coatings resulting therefrom (abstract). The acid-functionalized polymer is preferably a copolymer comprising an olefin and an ethylenically unsaturated carboxylic acid (col 4, lines 28+). The preferred olefin is ethylene (col 4, line 30). Preferred unsaturated carboxylic acids are methacrylic and acrylic acids (col 5, lines 44+). The acid groups are neutralized using various ionic salts including those of zinc, aluminum, lithium, sodium, and the like (col 6, lines 13+). Zinc and aluminum salts are preferred (col 6, line 30). Said salt neutralized polymer is understood to read on the claimed ionomer layer. Akki teaches said polymer may be pigmented (col 8, line 63). The coating is applied to substrates such as primed or unprimed metal substrates (col 7, lines 46+) such as iron, steel, galvanized steel, aluminum and the like. Said primers layers are understood to be analogous to the claimed tie layers and the priming limitation of claim 20.

Akki teaches that the coating may be used with a clear coat finish (col 9, lines14+), but does not teach said clear coat may be an ionomer. However, Mitsui teaches a clear coating composition excellent in acid resistance, coating film appearance, and weatherability (abstract). The clear coat comprises two acrylic copolymers and a salt, and is understood to be an ionomer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a clear coat taught in Mitsui on the metal laminate taught in Akki. The motivation for doing so would have been said coating provides excellent acid resistance, coating film appearance, and weatherability.

With regard to claim 14 and 17, Akki teaches that both surfaces of the substrate may be coated with the ionomer coating. In such an instance, one of the ionomeric coatings is understood to read on the thermoplastic barrier coating of claims 14 and 17.

The substrate may be a metal substrate. The metal may be primed or coated before coating with the coating of the invention (col 7, lines 47+). One or more surfaces of the substrate can be coated (col 9, lines 6+). When the substrate is an automobile body, the coating can be applied directly onto the metal surface or primer can be applied first (col 9, lines 12+).

5. Claims 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akki et al (US 6,020,034) in view of JP 03-126777 (herein referred to as Mitsui) as applied to claims 9-11, 13-17, 19, and 20 above, and further in view of Kordomenos et al (US 4,491,641) for reasons of record.

Akki is relied upon as above, but does not teach that an epoxy primed unpolished metal substrate may be utilized as the substrate of the invention. However, Akki teaches that the substrate may be a metal substrate of an automotive body. Furthermore, Kordomenos teaches an unpolished metal substrate of an automotive vehicle body coated with a primer comprising an epoxy ester resin (col 2, lines 63+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the substrate taught in Kordomenos in the invention taught in Akki. The motivation for doing so would have been that Kordomenos teaches that such substrates are suitable for use as automotive body panels.

Response to Arguments

Applicant's arguments filed July 19, 2005 have been fully considered but they are not persuasive.

Claim 9 requires the metal substrate be formable and that is has a pigmented layer at least partially disposed on it. According to Applicant, Akki neither discloses nor suggests applying an ionomer or any other layer to unformed articles or parts. The examiner initially notes Ellison, not Akki, was relied upon to teach the claimed clear coat ionomer layer. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). With regard to the argument that the metal articles are preformed, not unformed, it is noted that the features upon which applicant relies (i.e., unformed substrate) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The substrate is understood to be formable because it comprises the same material as applicant's claimed substrate.

With regard to Ellison, Applicant argues the mere mention of ionomer in Ellison does not provide any motivation to combine pigmented and clear ionomer layers on formable metal substrates. The examiner respectfully disagrees. Ellison teaches ionomeric clear coats may be applied to color coated metal layers in order to provide resistance to UV rays, etching from acid rain, chipping from stones, marring, gouging, abrasion, staining and discoloration and other deleterious materials that come in contact with automobile exteriors (col 4, lines 18+). Thus, Ellison is understood to provide ample motivation for the proposed modification.

With regard to Kordomenos, Applicant argues there is not disclosure within Kordomenos to suggest treatment of anything but preformed substrates. With regard to the argument that the metal articles are preformed, not unformed, it is noted that the features upon which applicant relies (i.e., unformed substrate) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The substrate is understood to be formable because it comprises the same material as applicant's claimed substrate.

Applicant further argues there is no disclosure that would motivate one to use ionomers with said substrate. Said argument is noted, but Kordomenos was never relied upon for said teaching. Akki was relied upon to teach a laminate comprising a primed metal substrate and ionomeric layer. Kordomenos was merely relied upon to teach the use of epoxy primed metal substrate as the primer taught in Akki.

With regard to the rejection of claims 9-11, 13-17, 19 and 20 as being unpatentable over Akki in view of Mitsui, Applicant argues there is no suggestion in Akki to apply any further coating to the pigmented ionomeric layer taught therein. The examiner respectfully disagrees. Akki teaches that the coating may be used with a clear coat finish (col 9, lines14+). The examiner further notes that the substrate of Akki is understood to be formable for the reasons noted above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin R. Kruer
Patent Examiner-Art Unit 1773